

Version with markings to show changes made.

In the Claims:

1. (Amended) A method for searching a peer-to-peer computer network comprising:
  - a. collecting data about a plurality of computers within the network, including a network location of each of the plurality of computers;
  - b. selecting at least one computer to be a selected computer, based on the collected data; and
  - c. routing a search [queries] query from a user to the selected computer via the network location of the selected computer.
2. (Amended) The method of claim 1, wherein said collecting data about a plurality of computers within the network further comprises:
  - a. sending a signal to at least one of the plurality of computers;
  - b. receiving the signal upon its return from the at least one computer; and
  - c. forming a profile characterizing the at least one computer[, ] based on information provided by the signal.
3. (Amended) The method of claim 2, wherein the profile further comprises a round trip time measure taken by the signal during its travel to and from the at least one computer.
4. (Amended) The method of claim 2, wherein the profile further comprises information on [the] a number of files contained within the at least one computer.
5. (Amended) The method of claim 2, wherein the profile further comprises information on [the] an amount of content available to the network on the at least one computer.

6. (Amended) The method of claim 2, wherein the profile further comprises information on [the capability of] the at least one computer's capability to process a search query.
7. (Amended) The method of claim 2, wherein the profile further comprises information on [the] a number of connected computers encountered by the signal during its travel to and from the at least one computer.
8. (Amended) The method of claim 2, wherein the profile further comprises information on [the] a number of additional computers connected to the at least one computer.
9. (Amended) The method of claim [1] 2, wherein the profile further comprises information on a frequency with which the plurality of computers are connected to the network.
10. (Amended) The method of claim [1] 2, wherein the profile further comprises information on which of the plurality of computers are currently connected to the network.
11. (Amended) The method of claim 1, [wherein said collecting data about a plurality of computers within the network] further [comprises] comprising:
  - a. collecting a plurality of statistical measures which characterize each of the plurality of computers;[,  
and wherein said selecting the selected computer based on the collected data further comprises:]
  - b. assigning a weighted score to each statistical measure for each of the plurality of computers;
  - c. combining the weighted scores to obtain a rank for each of the plurality of computers; and
  - d. ranking the plurality of computers according to the [resulting ranks] weighted scores.

12. (Amended) The method of claim 1, wherein said collecting data about a plurality of computers within the network further comprises[:]  
monitoring data exchanges [which occur] between the plurality of computers.
13. (Amended) The method of claim 1[2,] further comprising[:] storing the collected data in a memory, wherein at least a portion of the collected data is content data which [comprises] includes information on the content data available for searching on the plurality of computers.
14. (Amended) The method of claim 13, further comprising:
- a. removing the content data after a predetermined period of time;
  - b. sending a common user search [queries] query into the network on a periodic basis; and
  - c. storing [the results] a result of the common user search query in the memory.
15. (Amended) The method of claim 13, [wherein said storing the content data in a memory comprises:] further comprising storing [choosing] a portion of the content data [to store] based on previous user requests.
16. (Amended) The method of claim 13, further comprising [wherein said collecting data about a plurality of computers within the network further comprises:]  
monitoring a current connectivity status of each of the plurality of computers.[:]  
[and wherein said selecting at least one computer to be a selected computer based on the collected data further comprises:  
selecting the selected computer based on the content data and the current connectivity status.]

17. (Amended) The method of claim 16, [wherein said collecting data about a plurality of computers within the network] further [comprises] comprising:

a. collecting a plurality of statistical measures which characterize each of the plurality of computers;[,

and wherein said selecting the selected computer based on the collected data further comprises:]

b. assigning a weighted score to each statistical measure for each of the plurality of computers;

c. combining the weighted scores to obtain a rank for each of the plurality of computers;

d. ranking the plurality of computers according to the [resulting ranks] weighted scores; and

e. selecting the [at least one] selected computer based on the content data, the current connectivity status and the ranks.

18. (Amended) The method of claim 13, further comprising[:]

storing a portion of the content data which identifies a type of file available for searching on the plurality of computers, wherein the selected computer is selected based in part on the type of file.[: and

selecting the selected computer based at least in part on the stored file-type content data.]

19. (Amended) The method of claim 1, [wherein said selecting at least one computer to be a selected computer] further [comprises:] comprising

selecting [at least] a second selected computer based on the collected data;[,]

and [wherein said routing a search query from a user to the selected computer further comprises:]

routing [a] the search query from the user to the second selected computer after a

selective one of a predetermined period of time and [, or in response to] a user request.

20. (Amended) The method of claim 2, wherein said sending a signal to at least one of the plurality of computers further comprises[:]

sending the signal [from ] to a plurality of geographical locations [which are remote from one another], wherein the geographical locations are selected based on their respective proximity to the [a plurality of] user[s].

21. (Amended) The method of claim 1, wherein said collecting data about the [a] plurality of computers within the network is performed periodically, [, so that the collected data is approximately current.]

22. (Amended) The method of claim 1, wherein said collecting data about a plurality of computers within the network further comprises:

- a. collecting data about a predetermined number of the plurality of computers at a first predetermined time interval;
- b. ranking the computers based on the collected data;
- c. retaining a set of hub computers which make up a predetermined percentage of the plurality of [most highly-ranked] computers that are most highly ranked; and
- d. collecting data about only the set of hub computers at a second predetermined time interval, wherein the second predetermined time interval [which] is smaller than the first predetermined time interval.

23. (Amended) A system by which a user may establish an optimal connection to a peer-to-peer computer network, comprising:

- a. a monitor [which measures] for measuring data about a plurality of computers within the network; and
- b. a selector [which selects] for selecting at least one of the plurality of computers to be a selected computer, based on the measured data, and which outputs a network

location of the selected computer to the user, to thereby allow the user to connect to the selected computer.

24. (Amended) The system of claim 23, wherein said monitor further comprises:
- a. a profiler which collects the measured data by sending a signal to at least one of the plurality of computers and receiving the signal therefrom, to thereby form a profile of the at least one of the plurality of computers; and
  - b. a database which stores the [collected] data collected by the profiler.
25. (Amended) The system of claim 24, wherein the profile further comprises a round trip time measure taken by the signal during its travel to and from the at least one computer.
26. (Amended) The system of claim 24, wherein the profile further comprises information on [the] a number of files contained within the at least one computer.
27. (Amended) The system of claim 24, wherein the profile further comprises information on [the] an amount of content available to the network on the at least one computer.
28. (Amended) The system of claim 24, wherein the profile further comprises information [on the capability] of the at least one computer's capability to process a search query.
29. (Amended) The system of claim 24, wherein the profile further comprises information on [the] a number of connected computers encountered by the signal during its travel to and from the at least one computer.
30. (Amended) The system of claim 24, wherein the profile further comprises information on [the] a number of additional computers connected to the at least one computer.
31. (Amended) The system of claim 24, wherein the profile further comprises information on a frequency with which the at least one computer is connected to the network.

32. (Amended) The system of claim 24, wherein the profile further comprises information on which of the plurality of computers are currently connected to the network.

33. (Amended) The system of claim 23, wherein the monitor is a computer within the network, and further wherein at least a portion of the measured data is collected by monitoring data exchanges [which travel through the monitor as they are transmitted through] in the network.

34. (Amended) The system of claim 23, further comprising: a memory for collecting [which is a computer within the network, and which collects content] the measured data wherein the measured data includes [comprising] information on [the] content available for searching on the plurality of computers, [by monitoring data exchanges which travel through the memory as they are transmitted through the network.]

35. (Amended) The system of claim 34, wherein the memory removes the content data after a predetermined period of time,  
[and] further wherein the memory sends common user search queries into the network on a periodic basis and stores the results.

36. (Amended) The system of claim 35, wherein a portion of the removed content data [which] identifies a type of file available for searching on the plurality of computers, the portion being [is] separately stored,  
[and] further wherein the [selector selects the] selected computer is selected based at least [in part] on the [stored file-type content data] type of file.

37. (Amended) The system of claim 34, wherein the memory stores [chooses] a portion of the content data [to store] based on previous user requests.

38. (Amended) The system of claim 23[4], wherein the monitor [monitors] determines a current connectivity status [of] for each of the plurality of computers, \_\_\_\_\_  
[and further] wherein [the selector selects] the selected computer is selected based on the content data and the current connectivity status.

39. (Cancelled)

40. (Amended) The system of claim 23, wherein the selector selects [at least] a second selected computer based on the data, [and] further wherein the selector outputs a network location of the second selected computer to the user after a selective one of a predetermined period of time[, or in] and a response to a user request.

41. (Amended) The system of claim 24, wherein the profilers are located at a plurality of geographical locations which are remote from one another, wherein the geographical locations are selected based on their respective proximity to a [plurality of] user[s].

44. (Amended) The system of claim 23, wherein the host monitor collects data about a predetermined number of the plurality of computers at a first predetermined time interval, [and] the host selector [ranks] ranking the computers accordingly, and [further wherein the host monitor retains] retaining a set of hub computers which make up a predetermined percentage of the plurality of [most highly-ranked] computers which are most highly-ranked, and thereafter collects data about only the set of hub computers at a second predetermined time interval, wherein the second predetermined time interval [which] is smaller than the first predetermined time interval.

45. (Amended) A computer program [product] for enabling [a processor in] a computer system to [implement a system for] optimally [connecting] couple to a peer-to-peer computer network, said computer program product utilizing [comprising:]



a computer usable medium having computer readable program code [means embodied in said medium for causing a program to execute on the computer system,] said computer readable program code [means further] comprising:

- a. means for collecting data about a plurality of computers within the network, including a network location of each of the plurality of computers;
- b. means for selecting at least one computer to be a selected computer, based on the collected data; and
- c. means for routing search queries from the computer system [a user] to the selected computer via the network location of the selected computer.

46. (Amended) The computer program [product] of claim 45, wherein said means for collecting data about a plurality of computers within the network further comprises:

- a. means for sending a signal to at least one of the plurality of computers;
- b. means for receiving the signal upon its return from the at least one computer; and
- c. means for forming a profile characterizing the at least one computer, based on information provided by the signal.

47. (Amended) The computer program [product] of claim 45, [wherein said means for collecting data about a plurality of computers within the network] further [comprises] comprising:

a. means for collecting a plurality of statistical measures which characterize each of the plurality of computers; [, and wherein said means for selecting the selected computer based on the collected data further comprises:]

- b. means for assigning a weighted score to each statistical measure for each of the plurality of computers;
- c. means for combining the weighted scores to obtain a rank for each of the plurality of computers; and

d. means for ranking the plurality of computers according to the [resulting ranks] weighted scores.

48. (Amended) The computer program [product] of claim 45[, wherein said means for collecting data about a plurality of computers within the network] further comprising [comprises:] means for monitoring data exchanges [which occur] between the plurality of computers.

49. (Amended) The computer program [product] of claim 48, further comprising:  
means for storing the collected data in a memory, wherein at least a portion of the collected data is content data which [comprises] includes information on [the] content available for searching on the plurality of computers.

50. (Amended) The computer program [product] of claim 49, further comprising:

a. means for removing the content data after a predetermined period of time;

b. means for sending a common user search query [queries into the network] on a periodic basis; and

c. means for storing a result of the common user search query [the results] in the memory.

51. (Amended) The computer program [product] of claim 49, wherein said means for storing [the content data in a memory comprises:

means for choosing] stores a portion of the content data [to store] based on previous user requests.

52. (Amended) The computer program [product] of claim 49[, wherein said means for collecting data about a plurality of computers within the network] further comprising [comprises:]

means for monitoring a current connectivity status of each of the plurality of computers, wherein the selected computer is selected

[and wherein said means for selecting at least one computer to be a selected computer based on the collected data further comprises:

means for selecting the selected computer] based on the content data and the current connectivity status.

53. (Amended) The computer program [product] of claim 45[, wherein said means for collecting data about a plurality of computers within the network] further comprising [comprises:]

a. means for collecting a plurality of statistical measures [which characterize] for each of the plurality of computers;[,

and wherein said means for selecting the selected computer based on the collected data further comprises:]

b. means for assigning a weighted score to each statistical measure for each of the plurality of computers;

c. means for combining the weighted scores to obtain a rank for each of the plurality of computers;

d. means for ranking the plurality of computers according to the weighted scores [resulting ranks], thereby producing a rank of each computer in the plurality; and

e. means for selecting the at least one computer based on the content data, the current connectivity status and the rank [ranks].

54. (Amended) The computer program [product] of claim 45, further comprising [a plurality of] means for sending the signal [from] to a plurality of geographical locations which

are remote from one another, wherein the geographical locations are selected based on their respective proximity to a user [plurality of users].

55. (Amended) A method for optimizing a computer's access to information, the method comprising:

- a. maintaining a first database which includes status information about a plurality of computers within a [the] network;
- b. maintaining a second database which includes content information about the plurality of computers within the network;
- c. filtering [the contents of] the content information in second database using the [contents] status information of the first database, at a time of a user request for information; and
- d. accessing at least one computer within the network based on the filtered contents of the second database.

56. (Amended) The method of claim 55[, wherein said maintaining a first database which includes status information about computers within the network] further comprising [comprises:]  
updating the status information periodically, so that the status information is [approximately] current [in time].

57. (Amended) The method of claim 55[, wherein said maintaining a second database which includes content information about the computers within the network] further [comprises:] comprising  
intercepting exchanges between the plurality of computers within the network.

58. (Amended) The method of claim 55, wherein said filtering the contents of the second database using the contents of the first database further comprises:

- a. identifying computers in the network (identified computers) which are least likely to provide information desired by the user, based on the status information; and

- b. removing the content information from the second database which is stored on the identified computers.
59. (Amended) The method of claim 58, wherein the status information includes a frequency with which the identified computers [within the network] are connected to the network.
60. (Amended) The method of claim 58, wherein the status information includes a current connectivity status of the identified computers [within the network].
61. (Amended) The method of claim 57, wherein the status information includes a download capability measurement of the identified computers [within the network].
62. (Amended) The method of claim 55, further comprising:
- a. maintaining a third database which includes content information about the computers within the network wherein the third database [which] identifies the types of files available for searching on the plurality of computers within the network;
  - b. filtering the content[s] information of the third database using the content[s] information of the first database, at a time of a user request for information; and
  - c. accessing at least one computer within the network based on the filtered contents of the third database.
63. (New) The system of claim 34, further comprising:
- a. means for collecting a plurality of statistical measures for each of the plurality of computers;
  - b. means for assigning a weighted score to each of the statistical measures; and
  - c. means for ranking the plurality of computers based on [a combination] at least one of the weighted scores for each of the statistical measures.

64. (New) A system for searching a peer to peer network based on a search query comprising:
- a. means for collecting data about a plurality of computers within the network;
  - b. means for selecting a selected computer of the plurality based on the collected data; and
  - c. means for routing the search query to the selected computer, wherein the selected computer provides relevant information to the search query.

By the above amendment, the Applicants have amended claims 1-38 and claims 40-62. The Applicants have also cancelled claim 39 and have added new claims 63 and 64. Applicants respectfully submit that the Claims 1-38 and 40-64 are in a condition for allowance, and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, the Examiner is encouraged to call the undersigned at (650) 833-0160 to discuss the same so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,  
HAVERSTOCK & OWENS LLP

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By: Thomas B. Haverstock

THOMAS B. HAVERSTOCK  
Reg. No.: 32,571

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